

E 120 125 130 135 140 145 150 E

N 40

**TROPICAL DEPRESSION 15W**  
**BEST TRACK TC-15W**  
**21 AUG- 30 AUG 91**  
**MAX SFC WIND 30KT**  
**MINIMUM SLP 997MB**

**LEGEND**

- 6-HR BEST TRACK POSITION
- a SPEED OF MOVEMENT (KT)
- b INTENSITY (KT)
- c POSITION AT XX/0000Z
- ..... TROPICAL DISTURBANCE
- ..... TROPICAL DEPRESSION
- TROPICAL STORM
- TYPHOON
- ◆ SUPER TYPHOON START
- ◇ SUPER TYPHOON END
- ◆◆◆ EXTRATROPICAL
- ◆◆◆ SUBTROPICAL
- \*\*\* DISSIPATING STAGE
- F FIRST WARNING ISSUED
- L LAST WARNING ISSUED

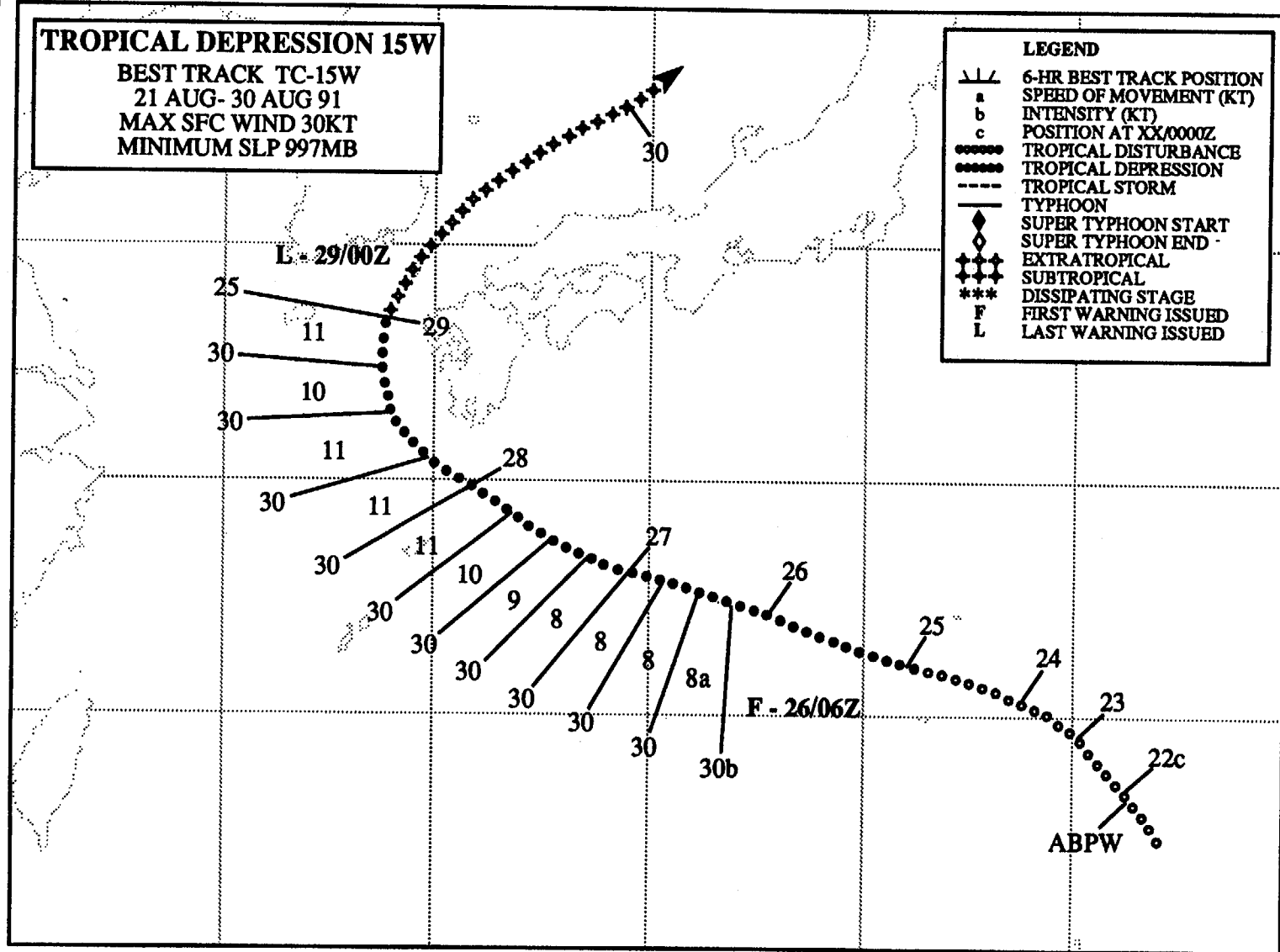
88

35

30

25

N 20



## TROPICAL DEPRESSION 15W

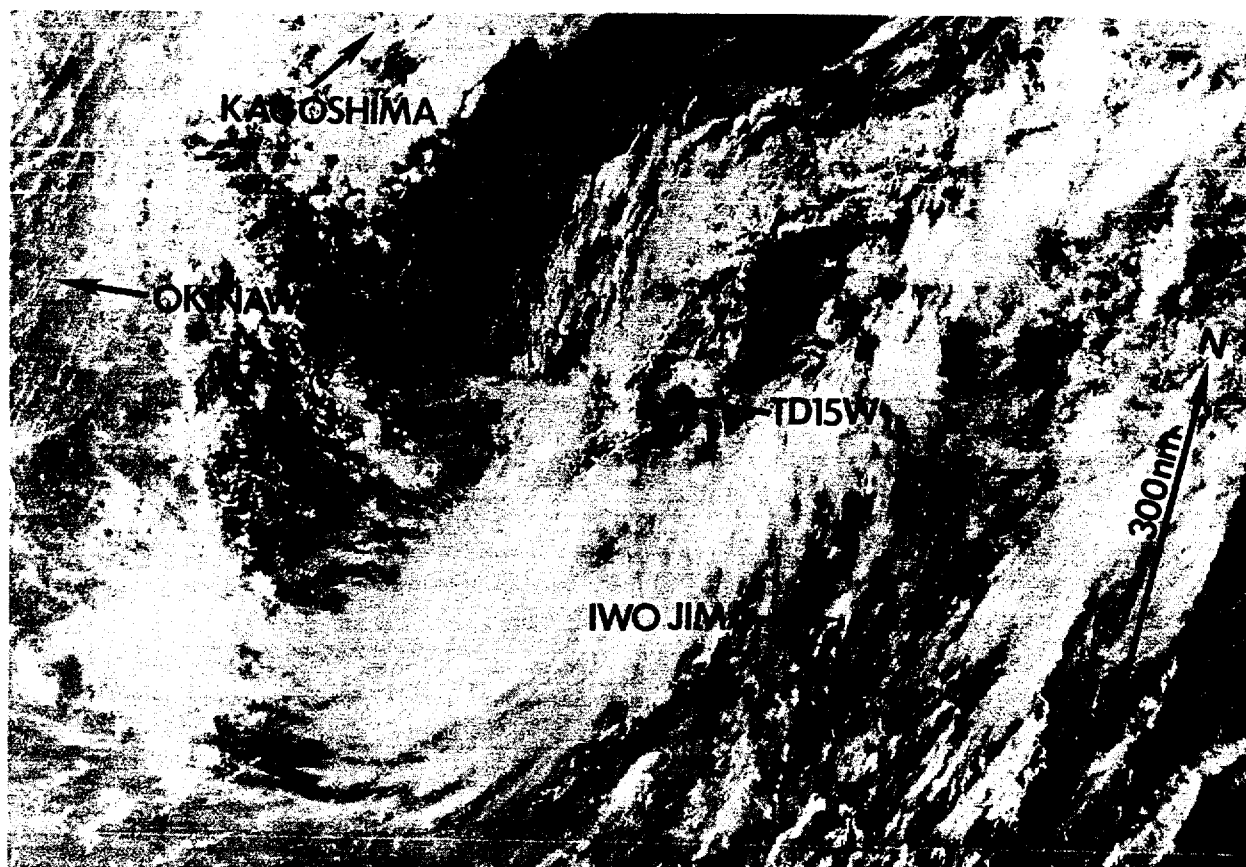


Figure 3-15-1 The well-defined center of Tropical Depression 15W, as seen 6 hours prior to the first warning on the system (252327Z August DMSP visual imagery).

When animated satellite imagery indicated cyclonic turning in an area of deep convection associated with a NSS monsoon gyre (Lander, 1992), a Significant Tropical Weather Advisory was reissued at 212200Z (August) to include the disturbance that was to become Tropical Depression 15W. For the next four days, a single, well-defined circulation center failed to develop. Then, following receipt of a ship report indicating 39 kt (20 m/sec) sustained winds and a surface pressure of 998 mb, the first warning on Tropical Depression 15W was issued at 260600Z. A Tropical Cyclone Formation Alert did not precede the first warning, and the minimal tropical storm intensity indicated by the earlier ship report was discounted due to the continued presence of a shear-type cloud pattern. The depression moved west-northwestward, south of Japan, recurved through a break in the subtropical ridge, and dissipated in the Sea of Japan. It is thought that Tropical Depression 15W did not intensify further because persistent vertical wind shear prevented the development of a persistent central dense overcast.